

US workers who carry guns are more likely to be killed on the job

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Workers in petrol stations, grocery stores, and other locations who take weapons with them to work are three to seven times as likely to be murdered at work than workers in equivalent jobs in which weapons are prohibited, a study has found (*American Journal of Public Health* 2005;95:6-8).

Although some Americans keep guns for protection, having a gun at work may increase the risk of becoming a victim of violence. "I know there are lots of people with guns, especially in retail businesses. I don't know they offer any benefit of increased worker safety," Dana Loomis, professor of epidemiology at the University of North Carolina at Chapel Hill and lead author, told the *BMJ*.

Murder is the second leading cause of death at work, after road traffic crashes, for workers in the United States. Every week, about 20 workers are killed and about 18 000 are assaulted.

Professor Loomis told the *BMJ* that this report was part of a study of workplace murders in North Carolina. The state has a thorough medical examiner system to investigate causes of death. This paper and previous ones from the study covered

105 workplaces where murders occurred between 1994 and 1998 and compared them with 210 control workplaces where no murders occurred (*American Journal of Epidemiology* 2001; 154:410-7 and *JAMA* 2002;287: 1011-7).

Workers who were allowed to carry weapons, such as chemical sprays, bats, knives, or guns, were three times as likely to die from workplace homicides as those who worked in places that prohib-

ited all weapons. Workers in places that allowed guns were seven times more likely to be killed.

The places where workers were most likely to be killed were convenience stores, petrol stations, grocery shops, bars, nightclubs, restaurants, and taxi services. Workers at highest risk were those who worked in male only workplaces and those with African-American or Asian employees. Working alone at night was especially dangerous.

Of the 105 murders studied, 60 were associated with a robbery of the workplace and 39 with disputes. Of the disputes, 20 were work related, 16 were with a partner or family member, and three were other or

unknown. The circumstances of six other murders were unknown. Safety measures to protect workers, besides keeping daylight hours, included eliminating solo work at night, keeping doors closed, and using bright outside lighting.

Professor Loomis said that he did not know why employers would allow workers to have guns on the job, but it might be the belief that guns offer protection against crime. However, he said, his data showed that places where guns were available increased the risk of homicide. Previous studies showed that households with guns were more likely to have someone affected by violence. □



COLUMBINE ALLIANCE/ALIANTE/SYGMA/GETTY IMAGES/BROADCASTING/GLOBAL COLLECTION

Filmmaker Michael Moore demonstrates in his film *Bowling for Columbine* how easy it is to buy ammunition. New research shows that carrying a weapon at work increases your chance of being killed

Initiative could give free access to UK medical research

Tony Delamothe *BMJ*

Most of the United Kingdom's new biomedical research could be freely available this time next year if a consortium led by the Wellcome Trust gets its way. Next week the consortium will advertise for a technical partner to set up a UK "mirror" of PubMed Central, the free online archive of life science literature administered by the US National Library of Medicine.

As well as making available the data held in PubMed

Central, the UK archive would allow the ingestion of local peer reviewed articles arising from research funded by the consortium partners.

Potential partners include the Medical Research Council, the Biotechnology and Biological Sciences Research Council, the Department of Health, Cancer Research UK, and the British Heart Foundation, who together fund most biomedical research in the United Kingdom.

The Wellcome Trust has already announced that it is making deposition of the author's final accepted (peer reviewed) manuscript in an open access archive a condition of funding, and the Research Councils UK looks set to follow their lead (*BMJ* 2005;330:923, 23 Apr). A study commissioned by a committee of the UK's further and

higher education funding bodies found that only 3% of authors would not comply with such a request from their funders.

By making deposition of the final manuscript a condition of funding, UK funders are going beyond the situation in the United States. In a climbdown from its initial proposals, the US National Institutes of Health is requesting, rather than mandating, its grantees to make the final version of their papers available for public display in PubMed Central within a year of publication. In both countries, however, publishers are equally concerned that such proposals will hit their journal subscriptions as the publisher's final version differs from the author's final version only because of technical editing.

In a list of frequently asked

questions, the Wellcome Trust confronts head on the possibility of publishers refusing to accept the condition of authors depositing an electronic copy of their paper in PubMed Central or its UK equivalent. Its answer is that its researchers "will have to reconsider where they first submit their work for publication."

While the Wellcome Trust's position of making the deposition of research papers in an open access archive was the exception rather than the rule, UK journals may have been tempted to tough it out. If most research articles from the UK come with the same strings attached, this strategy will no longer be possible. □

Competing interests: TD is a member of the national advisory committee of the US PubMed Central.